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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,427	03/08/2002	Man-Lin Chen	CHEN3350/EM	8770

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EXAMINER

GARRETT, DAWN L

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 01/07/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/092,427	Applicant(s) CHEN ET AL.	
	Examiner Dawn Garrett	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Response to Amendment

1. This Office action is responsive to the amendment dated October 26, 2003, paper no. 3. Claims 1-9 were amended and are currently pending.
2. The objections set forth in paper no. 2, paragraph 1 (a) to (f) and (h) to (dd) are withdrawn. The objection set forth in paragraph (g) is maintained, because the meaning of "between the cavity and insulating convex" is not understood. The words "the cavity" and "insulating convex" are not previously recited so their positions in the device are not understood.
3. The rejection of claim 1 under 35 USC 112, second paragraph, set forth in paper no. 2, paragraph 4, is maintained. The phrase "between the cavity and insulating convex" is not understood, since "the cavity" and "insulating convex" are not previously recited in the claim and their location is accordingly unknown.
4. The rejection of claim 3 under 35 USC 112, second paragraph, set forth in paper no. 2, par. 5, is withdrawn due to the amendment.
5. The rejection of claim 3 under 35 USC 112, second paragraph, set forth in paper no. 2, par. 6 is maintained. Applicant has failed to clarify or amend the claims. Again, the word "other" preceding "adhesive promoters" is indefinite. Also the "and/or" terminology is unclear for determining what materials may actually be present either alone or in combination.

Art Unit: 1774

6. The rejection of claim 4 under 35 USC 112, second paragraph, set forth in paper no. 2, par. 7 is withdrawn due to the amendment.

7. The rejection of claim 5 under 35 USC 112, second paragraph, set forth in paper no. 2, par. 8 is withdrawn due to the amendment.

8. The rejection of claim 9 under 35 USC 112, second paragraph, set forth in paper no. 2, par. 9 is maintained.

9. The rejection of claim 9 under 35 USC 112, second paragraph, set forth in paper no. 2, par. 10 is maintained.

10. The rejection of claims 1, 2, and 4-7 under 35 USC 103(a) as being unpatentable over Friend (US 6,580,212) in view of Yamaguchi et al. (2002/0003402 A1) set forth in paper no. 2, par. 12 is withdrawn.

11. The rejection of claims 3, 8, and 9 under 35 USC 103(a) as being unpatentable over Friend (US 6,580,212) in view of Yamaguchi et al. (2002/0003402 A1) in further view of Szmanda et al. (US 5,876,899) set forth in paper no. 2, par. 13 is withdrawn.

12. Claims 1, 4, and 5 are objected to because of the following informalities:

In claim 1, the phrase "by using the exposing and developing method" should be changed to "by using an exposing and developing method".

In claim 5, "the method of postbake" should be changed to "a method of postbake".

In claim 4, "has a convex top face has a smooth convex ball face shape" should be changed to "has a convex top face with a smooth convex ball face shape".

Appropriate correction is required.

Art Unit: 1774

13. Claims 1 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because it recites a hole transport layer on the hole injection layer, however, a hole injection layer is not previously set forth and accordingly the position of subsequent layers formed on the hole injection layer can not be determined.

Claim 9 recites "said catalyst", but claim 1 upon which claim 9 solely depends does not recite a catalyst. Accordingly, the meaning of this claim can not be ascertained.

Response to Arguments

14. Applicant's argument with respect to the rejections over Friend are now moot due to the withdrawal of the rejections over prior art. Applicant has not specifically stated why the 35 USC 112, second paragraph is traversed. Some of the rejections stated in the first Office action were not addressed by applicant in the amendment and accordingly, these rejections have been maintained.

Allowable Subject Matter

15. Claims 1-9 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action. The closest prior art, Friend (US 6,580,212) fails to teach or to render obvious a device comprising a positive photoresist insulation film in combination with all the specific

Art Unit: 1774

functional layers (i.e. hole transport layer, electron transport layer) of a device as required by instant claim 1.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571) 272-1523. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (571) 272-1526. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Application/Control Number: 10/092,427

Page 6

Art Unit: 1774

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1700.

DG

D.G.

January 2, 2004

CYNTHIA H. KELLY
SUPERVISOR, EXAMINER
TECHNOLOGY CENTER 1700

Cynthia H Kelly